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ABSTRACT

A description is given of "The Wisconsin Test of Adult Basic Education (WITABE)" which was developed specifically to measure the achievement of the individuals enrolled in the Rural Family Development (RGD) program at the University Extension, University of Wisconsin. The test is divided into three main parts or subtests: subtests 1 and 2 deal with basic reading and computational skills, respectively, and subtest 3 deals with the coping skills. The primary emphasis on the whole is on the coping skills. Tables present means and variances of the subtests for Grades 7, 8, and 9; correlations of subtests with the criterion; Hoyt reliability coefficients and testing time for the subtests. (DB)

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THE WISCONSIN TEST OF ADULT BASIC EDUCATION

(W I T A B E)

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In recent years many Adult Basic Education (ABE) programs are underway which are made feasible through the provisions of Section 309 of the Adult Education Act of 1966. In the main, they include curriculum development, research and evaluation, training and dissemination. A new dimension added in the ABE program development is the use of educational technology (Sherron and Peters, 1971). However, Greenleigh Associates (1966) have expressed a lack of suitable evaluative instruments to fit into a wide variety of programs.

The purpose of this report is to describe "The Wisconsin Test of Adult Basic Education (WITABE)" which has been developed specifically to measure the achievement of the individuals enrolled in the Rural Family Development (RFD) program at the University Extension, University of Wisconsin. With professional care and caution WITABE can be usefully adapted as a "Quick Test" to measure the achievement of the individuals enrolled in literacy classes, adult basic education classes, and for evaluating programs directed towards remedial education for functionally illiterate adults lacking in fundamental communication, computational, and social skills.

In the past, test users and program evaluators in the field of adult basic education have been particularly critical that the test

content of available tests are not adult oriented. WITABE has been developed with an attempt to meet the challenge of such test critics. Besides making the content adult oriented, the items presented for measuring the costruct under consideration are unconventional, interesting, and self motivating for adults. At no place does WITABE require undue sophistication of perceptual organization or finer motor skills. The problems are concrete rather than abstract on consonance with the cognitive style among the functionally illiterate adults. The instructions are also simple, both from the point of view of illiterate adults and from the point of view of administration by para-professionals.

Since WITABE has been developed specifically for evaluating RFD program, a brief description of the aims and basic philosophy of the program will be in order. Prospective users of WITABE are encouraged to review detailed objectives of RFD program (RFD Newsletter, March 1970) before adopting the test for their own needs.

RFD is an unique, imaginative research and development adult basic education project funded by US Office of Education to test certain assumptions in contemporary theories of mass communication (RFD Newsletter, January 1970). The aim of RFD has been to study the effectiveness of three channels of communications, viz. television, content materials (print), and person-to-person (Home visitors), in providing the undereducated rural adult the <u>life-coping skills</u> necessary to get out of their poverty cycle.

Steve Udvari (1969) who is the curriculum architect of the RFD program gives the following definition of adult basic education:

"Adult Basic Education is an institutional program in the continuing stream of life-education to improve the quality of life of adults who are functioning at a level of performance that does not permit their skillful use of available alternatives and their total involvement in today's complex society."

In essence Udvari has argued that goals for ABE programs should be derived from the need of adult individuals. He identifies four basic needs and based on those needs he prescribes a set of goals, viz.; 1) the goal of self-realization, 2) the goal of human relationships, 3) the goal of civic resposibility. He has emphasised that as community persons we employ coping skills to participate in civic resposibilities. Ultimately these coping skills are used as strategies for political and social change.

As part of its delivery system, RFD developed a three-track scope and sequence model. It utilizes the concepts inherent in communication and computation skills of the elementary education as two of its tracks. The third track, called life-coping skills, is an expansion of the two basic skill levels and is specifically defined in terms of terminal behavior objectives for adults.

The Wisconsin Test of Adult Basic Education (WITABE) is divided into three main parts or subtests consistent with the delivery system. Subtests 1 and 2 deal with basic reading and computational skills respectively, and subtest 3 deals with the coping skills. The primary emphasis in the instrument on the whole is on the coping skills. It has been designed to measure a hypothesised construct "adult-achieve-

ment" which is reflected by an individuals capability of applying basic reading and computational skills, and beyond this requires of him to draw upon his life experiences. It is believed that this trait comes about by having the essence of information needed by our society and having the capacity of using it in appropriate situations. The description of each of the subtests in WITABE is as follows:

Communications Subtest - It has 20 items in multiple choice format. Of the 20 items, 9 are vocabulary items ranging in difficulty span from the first grade to the eight grade level. Four of the items require the examinee to arrange letters like "K A L W" into meaningful words. Another four items (14-17) measure behaviors on the usage of a "Table of Contents" in a book. The questions are straight forward and do not involve any tricks.

Numerical Subtest - It has 19 items all of which are in multiple choice format. The items are based on number recognition, knowledge of fractions, multiplication tables, measure of area and volume, etc. Seven of the items (33-39) require the knowledge of arithmetic operations to solve adult-oriented problems dealing with every day life situations.

Coping skills Subtest - This subtest has 28 items. The items are presented in an unconventional mode, more like fun-to-do problems. The content of the items consists of things like T.V. program listing, sale ads, and job vacancy columns as our subject would normally see them. Some of the other items require completion of tax returns, filling out of mail order forms, figuring amounts indicated on a credit card, using a telephone directory, etc. Each of these behaviors is

tested from a lower level of sophistication through higher levels. This is done so as to minimise an examinee's frustation and embarrasment due to his inability to respond to an item, and thus sustain his interest and cooperation during etsting.

Psychometric Properties

Validity - The content validity of the items was examined by two experts in the ABE field especially with regard to conformity with the objectives of the Rural Family Development Program (1970). To study the disreminability of the subtests at various grade levels, the experimental version (items #26 and #27 excluded) of WITABE was administered to students of a rural high school in Wisconsin. The means and standard deviations of the three subtests for grades VII, VIII and IX were as follows:

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Table 1 about here

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The final version of WITABE was administered to the subjects in the control and the treatment groups of the RFD program after the subjects in the treatment group were exposed to full extent of the program. After about eight weeks of the administration of WITABE, all the subjects were asked on a criterion instrument to express the amount of change that they think occured due to exposure of the treatment. Interviewers were used for administering this instrument. The correlation of each subtest with the score on the criterion instrument were as follows:

Table 2

Reliability - Hoyt reliability coefficient of the various subtests and of the total test was estimated by administering the experimental version of WITABE to 37 subjects (22 being the students enrolled in adult basic education classes,15 being the members of the Headstart parent group in rural Wisconsin). The final version of WITABE has items #26 and #27 in the coping skills subtest which were not included in the trial instrument. The Hoyt realiability indices and the testing time were found as follows:

Table 3

Test Administration - The test has been designed to be easily administered. In particular, it is designed so that para-professionals administering the test would face no problems. Further WITABE is a power test. The indicated time limits on the test booklet are for guidance only and are not meant to be adhered rigidly. The instructions are brief and are printed on the first leaf and the leaves intervening subtests.

Scoring - The test booklet is designed to be hand scored. A standardised scoring key for each item has been provided.

Norms - Since WITABE has been developed basically for an applied research project, the efforts in developing WITABE were by necessity quality assurance in nature for a particular level of coping skills. Although it has become customary to talk of standardised achievement

tests in terms of grade equivalency norms, it seems that grade equivalency means little for programs devoted to more general coping skills.

TABLE 1

Means and Variances of the Subtests for Grades VII, VIII, IX

Grade	N	Subtest 1		Subtest 2		Subtest 3	
		Mean	sd	Mean	sd	Mean	sd
VII	22	13.77	2.10	10.05	2.38	15.32	3.17
VIII	55	15.53	2.38	13.28	2.82	17.55	4.29
IX	25	17.44	2.71	15.60	2.40	19.44	4.41

TABLE 2

Correlations of Subtests with the Criterion

Subtest	Correlation
Communication	0.51
Computation	0.59
Coping skills	0.65

TABLE 3

Hoyt Reliability Coefficients and Testing Time for the Subtests

Subtest	No. of Items	Testing Time	Hoyt Reliability
Communication	20	15 minutes	0.90
Computation	19	30 minutes	0.88
Coping skills	28	45 minutes	0.90
Total Test	67	1 hr., 30 mts.	0.96

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